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# Pest Management News

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OFFICIAL NEWSLETTER OF THE INTEGRATED PEST MANAGEMENT RESEARCH, DEVELOPMENT AND APPLICATIONS PROGRAM  
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## Wilderness Symposium Slate Announced

Coordinator Dave Kulhavy of Stephen F. Austin State University has announced the agenda for a symposium on "Wilderness and Natural Areas in the East: A Management Challenge." The conference (see PM News, issue #51) will be held at the Ramada Inn in Nacogdoches, TX, May 13-15, under the cosponsorship of the SFA School of Forestry, the Forest Service's Southeastern and Southern Stations and Region 8, and the Wilderness Society.

The announcement notes that eastern wilderness and natural areas have management, ecological, and user considerations uniquely associated with them due to their small size and proximity to other landownerships. The symposium's intent is to provide a forum for exchange of current ideas between researchers and land managers. Session topics include 1) forest ecology — wildlife, vegetation and forest protection; 2) management issues; 3) visitor needs and user impact; and 4) grassland and savannah ecology. The May 14 session dealing with forest protection will be of considerable interest to entomologists and others who've been following the course of the recent Texas and Louisiana SPB outbreaks in wilderness areas. The agenda follows:

- |        |           |   |
|--------|-----------|---|
| May 13 | 7:00 a.m. | Registration and Conference Orientation   |
|        | 9:15      | Welcoming addresses by Kent T. Adair, Dean, School of Forestry, Stephen F. Austin; John Alcock, Regional Forester, Southern Region; and Tom Ellis, Director, Southern Station |
|        | 9:40      | "Wilderness: Legal, Social, Philosophical and Management Perspectives" — John C. Hendee, Assistant Director, Southeastern Station   |
|        | 10:40     | "USDA Forest Service Perspectives on Wilderness Management" — Paul Barker, Forest Service, Washington, DC   |
|        | 11:10     | "History & Status of Management Issues in Wilderness" — Larry Phillips, Forest Service, Washington, DC  |
|        | 11:40     | "Why Have Wilderness?" — Dr. Peter Kirby, The Wilderness Society, Washington, DC  |
|        | 12:10     | "Problems in Wilderness and Natural Areas" — Dave Drummond, FPM, Southern Region  |

### CONCURRENT SESSIONS

- 2:00- *Wildlife Ecology and Management*, moderated by James G. Dickson, SO Station

(Includes papers on habitat selection; deer in eastern wilderness; browsing effects on vegetation; moose and wilderness management; effects of wilderness preservation on red-cockaded woodpecker; raptors in eastern wilderness; and wilderness/disease relationships)

- 2:00- *Visitor Needs and User Impact*, moderated by Michael Legg, S.F.A., and H. Ken Cordell, SE Station

(Includes papers on user perception of wilderness; user perception of back-country management; impact of crowding on wilderness; resource impacts; human impacts; use of information to manage wilderness users; expectations/perceptions of recreation visitors)

### May 14 CONCURRENT SESSIONS

- 8:00- *Visitor Needs and User Impact* (continuation)

(Includes papers on recreation impact on wilderness; Shining Rock Wilderness; patterns in remote forest distribution; current/future uses of eastern wilderness)

- 10:00 a.m.- *Management Issues*, moderated by Larry Phillips, Region 8

(Includes papers on wilderness management in Shenandoah National Park; wilderness air quality; fire in eastern forest ecosystems; fire in longleaf pine; fire in Appalachian hardwoods; mineral rights in wilderness/natural areas; oil/gas impacts; vegetation development on abandoned oil/gas sites; management issues in the Northeast; untrammeled wilderness vis-a-vis confining use; wilderness managers and mass media; public involvement in wilderness management)

- 8:00- *Forest Protection: Ecology and Management*, moderated by Dave Drummond, FPM, Southern Region

(Includes papers on the role of insects in the ecosystem; coping with forest pests in southern wilderness; hazard rating for SPB in wilderness; the Four Notch: effects of de-



layed management; disease management in eastern wilderness; concepts/applications in wilderness; technology transfer)

11:15-  
Noon

*Vegetation: Ecology and Management*, moderated by J. D. McCullough, S.F.A.

(Includes papers on natural areas management in Texas parks; hydrological aspects of mature pine forest in east Texas)

1:30-  
5:30 p.m.

*Grasslands and Savannas: Ecology and Management*, moderated by Fred Smeins, Texas A&M

(Includes papers on preservation status of prairie grasslands/ecological concepts in prairie management; oak hickory savannas: preservation, status, management; southeastern savannah and associated communities; pine barrens of New Jersey; cedar glades; Missouri grasslands/savannas; pocosins and associated communities of the Southeast; grasslands/savannas of east Texas; management problems in the Midwest)

#### May 15 CONCURRENT SESSIONS

8:00-  
10:45 a.m. *Wildlife Ecology and Management*, moderated by Richard Conner, SO Station

(Includes papers on wilderness as wild turkey habitat; black bear habitat needs; wildernesses as laboratories for small mammal study; wilderness management: perspective on furbearers; eastern wilderness area impact on squirrels; eastern wilderness/natural areas as genetic preserves)

8:00-  
10:45 a.m. *Vegetation Ecology and Management*, (continued)

(Includes papers on floristic composition/management of east Texas pitcher plant; bogs under different ownership regimes; vegetation of Larsen Sandylands Sanctuary, TX; floristic aspects of Graham Creek, TX; bottomland hardwood forests; limnological aspects of Graham Creek)

The symposium wrapup will be presented by Robert Lucas, Intermountain Station, followed by a panel discussion of Wilderness and Natural Areas Management Challenges, moderated by Dr. Adair and including panel members Lucas; William Lannan, Supervisor, National Forests in Texas; Rex Boner of the Nature Conservancy; Joe Roggenbuck of Virginia Polytechnic Institute and State University; and Thomas E. Lubbert of the National Park Service.

## Slash Pine Rust Model Adapted to PC

A new version of a slash pine growth and yield model for unthinned, fusiform rust infected plantations is available for the IBM PC and compatibles. The model was originally developed for mini and mainframe computers by a team of Southern Station researchers with support from the Integrated Pest Management Program.

The PC version is written in FORTRAN 77, and features an interactive menu with numerous options, including a HELP facility, user-specified merchantability standards, both brief and full output formats, and automatic comparisons between stands with different rust levels.

Anyone interested in obtaining a copy of the program should call or write Warren Nance, U.S. Forest Service, P.O. Box 2008, GMF, Gulfport, MS; phone 601/864-3972.

## New IPM Textbook in Print

A comprehensive reference work entitled "Integrated Pest Management in Pine-Bark Beetle Ecosystems," edited by William E. Waters, Ronald W. Stark, and David L. Wood has recently been published by the Interscience Division of John Wiley & Sons, New York. Special emphasis is given to research resulting from recent National Science Foundation/Environmental Protection Agency and related United States Department of Agriculture, Forest Service programs. A number of current and former ESPBRAP/IPM Program cooperators are among the contributors to this very high quality work, including Bob Coulson, Bill Leuschner, C. J. DeMars, and Fred Stephen.

The 256-page book offers a detailed treatment of pine bark beetles and their effects on forests and forest products in the United States and Canada, and summarizes the latest knowledge and technology for managing three major bark beetle species — the western pine beetle, the mountain pine beetle, and the southern pine beetle. It includes chapters on pest management system concepts, population dynamics, stand dynamics, impacts on forest uses and values, treatment tactics and strategies, population and damage monitoring, and decision analysis. Pest management specialists, researchers, crop protection specialists, forestry students, and others will find this a valuable guide for an improved understanding of the balance between pine bark beetles and their host ecosystems.

Those wishing more information may contact the publisher: Wiley-Interscience, Div. John Wiley & Sons, Inc., 605 Third Avenue, New York, N.Y. 10158.

## Limited Edition "Forester's Handbook" Off Press

The Texas Forest Service has announced the availability of its "limited edition" of IPM's "Forester's Handbook for Reducing Bark Beetle and Disease-Caused Losses in Southern Pines" (see PM News #50). This reissue is offered by the National Association of State Foresters under the auspices of TFS, at a cost of \$6 per copy. Contact Director, Texas Forest Service, Texas A&M University System, College Station, TX 77843; phone 409/845-2641.



## Clemson Forestry Forum Meets

"Integrated Pest Management: The Decisionmaking Approach" was the theme of the fifth annual Forestry Forum, held March 12, 1985, at Clemson University under the sponsorship of their Cooperative Extension Service and Department of Forestry. Moderator of the morning session was Andy Boone of the S.C. Forestry Commission and topics were:

IPM in Southern Pine Forests: Concepts and Practice — Bob Thatcher, IPM Program

The Management and Impact of Tip Moth and Reproduction Weevils — Steve Cade, Weyerhaeuser Co.

Fusiform Rust: Management Decisions in Early Stand Life — Warren Nance, Southern Station

Beating the Beetle Through Early Action — Garland Mason, IPM Program

Thinning to Reduce SPB Losses: the Economic Justification — Roy Hedden, Clemson University

Moderator of the afternoon session was Richard A. Harper of Westvaco. Speakers and topics presented were:

Annosus Root Rot Management System — Sam Alexander, V.P.I.

Fusiform Rust: Management Decisions During Late Stand Life — Roger Belanger, Southeastern Station

Hazard Rating for Littleleaf Disease and SPB on the Sumter NF — Steve Oak, R-8 FPM

Vegetation Management — Steve Metcalfe, Auburn University

The program also featured an "IPM Decisionmaking Software Display and Demonstration" and a question and answer session following the presented papers. The proceedings will be published shortly. For more information, contact Don Ham, Cooperative Extension Service, Clemson University, Clemson, SC 29631; phone 803/656-2478.

## New Wilderness Act Prompts Updated SPB Policy

Recent designation of five new portions of the National Forests in Texas as wilderness areas has led to clarification of Federal and State SPB control procedures for wilderness there. (These are the first wilderness areas to be located in Texas.)

Based on guidelines developed under an environmental assessment and decision statement approved by the Regional Forester for the Forest Service's Southern Region, the Agency will initiate control of the SPB if specific conditions develop. Controls are designed to contain spots within wilderness boundaries and prevent their spread. (About 90 SPB spots on the new wilderness areas have been identified thus far and are being closely monitored.) Generally, a spot must spread to more than 30 acres before controls are undertaken. Forest management practices on Federal lands

are governed by numerous legal requirements including about 25 Federal laws directly affecting public land management.

The Texas Forest Service position is that prompt control of SPB outbreaks on State lands is mandatory under provisions of the Texas Forest Pest Act of 1963, which gives the State agency not only responsibility to monitor pest infestations, but also to take control measures deemed necessary on areas where landowners have not taken them.

Public hearings on wilderness areas in Texas will be held, and information is available from: U.S. Forest Service; Homer Garrison Federal Bldg., 701 N. First, Lufkin, TX 75901.

## LSU Hosts Insect/Disease Conference

The theme for Louisiana State University's 34th Annual Forestry Symposium was "Insects and Diseases of Southern Forests." The meeting took place March 26 and 27 in Baton Rouge and was cosponsored by the University's School of Forestry, Wildlife and Fisheries and Cooperative Extension Service. Cochairmen Rich Goyer and John P. Jones of LSU's Entomology and Plant Pathology Departments, respectively, organized a busy 2 days of activities commencing with welcoming addresses by Dr. Thomas Hansbrough, Director of the School of Forestry, Wildlife and Fisheries, and Dr. H. Rouse Caffey, Chancellor, LSU Agriculture Center.

Session I, moderated by Harvey Toko of R-8 FPM, started off with a panel discussion of "How Insects Impact Forest Industry," which involved panelists from Weaver Brothers Land & Timber Company, Boise Southern Corporation, and a private consulting firm, all located in Louisiana. Other presentations in the first session described recent advances in insect and disease control in pine seed orchards (Julie Weatherby, R-8 FPM) and nursery diseases and out-planting survival (James Rowan, Southeastern Station).

The day's second session, moderated by Louisiana State Forester Mike Mety, opened with a presentation by Bob Coulson of Texas A&M on recent advances in bark beetle management via the IPM Decision Support System. Coulson was followed by Glen Snow of the Southern Station who discussed fusiform rust resistance in loblolly pine. Evan Nebeker of Mississippi State then described the influence of forestry practices on bark beetle populations. Oak wilt control was the topic of Dave Appel (Texas A&M), who was followed by Fred Stephen of the University of Arkansas with a description of host resistance to bark beetles. Session II concluded with a presentation on recent advances in brown spot control by Al Kais, Southern Station.

The following morning, Session III got underway with a discussion on utilization of pheromones in forest insect management by Wayne Berisford (University of Georgia). He was followed by Harry Coppel of the University of Wisconsin who described biological and natural controls of forest insects. Terry Amburgey of Mississippi State then discussed



ways to reduce losses from wood deterioration through proper forestry practices, followed by Ron Billings of the Texas Forest Service who debated the question: "Implementing Forest Pest Management: Who's Responsibility Is It?" The final presentation of the symposium was given by Warren Nance (Southern Station) who described some practical applications of yield prediction systems for rust-infected slash and loblolly pine plantations which included a computer demonstration.

A highlight of the symposium was a display of exhibits of interest to the forestry community. Nearly 100 attendees participated in the activities. A published proceedings is planned. Readers wishing more information may contact Dr. Richard A. Goyer, Department of Entomology, Louisiana State University, Baton Rouge, LA 70803; phone 504/388-1634.

## **New IPM Handbooks Printed**

Two new Agriculture Handbooks in the IPM Program's Integrated Pest Management Handbook series have just come off the press. These are AH 634, "Identification and Biology of Southern Pine Bark Beetles," and AH 637, "Rating the Susceptibility of Stands to Southern Pine Beetle Attack." (See complete reference information in Other Publications, p. 5.) Copies are available from the Program office, 2500 Shreveport Highway, Pineville, LA 71360, as well as the Southern Region headquarters, 1720 Peachtree Rd. NW, Atlanta, GA 30367.

## **Texas Issues More SPB Data**

Recounting the SPB outbreak that occurred in the State during the past year, the Texas Forest Service has issued a followup report that supports the premise that beetle problems can be curtailed through good forest management. Generally, thinned plantations were rarely attacked during the Texas outbreak. However, young (8-12 years), dense, unthinned stands were attacked.

The account, appearing in a recent edition of the Texas Forestry Association's newsletter, also disclosed that SPB activity reached outbreak levels in 20 counties in the State in 1984, with the infestation zone covering most of the southern half of east Texas. With approximately 25 percent of the infestations occurring on nonindustrial private lands and 30 percent on forest industry holdings, the TFS is urging private landowners to make a concerted effort now to control active infestations through salvage removal since beetle activity is expected to continue in 1985. (Based on TFS estimates, over half the 115 million board feet of timber killed through the end of last year has been salvaged.) The TFS will provide information on how to apply salvage or cut-and-leave controls. Contact their Pest Control Section, P. O. Box 310, Lufkin, TX 75901 or phone 409/639-8170.

## **PM News Really Gets Around!**

Our readership includes the Bio-Integral Resource Center (BIRC Inc.), a nonprofit California-based institution involved in integrated resource management, pest management, and community education. BIRC publishes their own newsletter, "The IPM Practitioner," which monitors the field of pest management. Contents of a recent issue included information on a number of rodent and insect pests, research notes on new technology, journal abstracts, a publications list on various topics, a products and services section, a calendar of events, and a special interest section. The latter featured an item on a PM News Special edition (#46) that described IPM computer models. For the benefit of those readers interested in the BIRC newsletter and other company publications, they can be contacted through Box 7414, Berkeley, CA 94706; or phone 418/524-2567.

## **Recent Pesticide Publications Available**

In the interest of keeping its readership informed of the latest technology in the field, PM News calls to your attention several Forest Service publications dealing with pesticide use which have recently been received in the Program office:

Exposure of Forest Workers Using Herbicides Measured, by T.L. Lavy, J.D. Mattice, and L.A. Norris, For. Bull. R8-FB/P 13 (For. Pesticides Fact Sheet #2) available from the Southern Region, 1720 Peachtree Rd., NW, Atlanta, GA 30367.

Feasibility of Aerial Spraying of Southern Pine Seed Orchards, by John W. Barry, Larry R. Barber, Patricia A. Kenney, and Neil Overgaard, So. Jour. Applied For. 8(3); 1984, available from USDA Forest Service, Forest Pest Management, Davis, CA 95616.

Deposition of Chemical and Biological Agents in Conifers, by John W. Barry, Ch. 10 of "Chemical and Biological Controls in Forestry," Proc. Div. of Pesticide Chemistry, 185th Meeting of the American Chemical Society, Seattle, Wash.; available from the Davis, CA address.

Technological Progress in Aerial Application of Pesticides by Robert B. Ekblad and John W. Barry, Ch. 8 of the above symposium proceedings and also available from the Davis, CA address.

## **SPB Slowed by Kisatchie Salvage Operation**

An item in the newsletter of the Louisiana Forestry Association notes that 1,000 of the nearly 8,700 acres of the Kisatchie Hills Wilderness area in Louisiana's Kisatchie National Forest have now been destroyed by the southern pine





beetle. The report states that 5 million board feet of timber have been affected. A recent tour of the wilderness outbreak brought media, tree farmers, and foresters together to view the ongoing salvage operations, which have had some effect in slowing down the beetle onslaught.

## Other Publications

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- Lorio, P.L., Jr.; Zarnoch, S.J. Calculating tree bole surface area for estimating populations of the southern pine beetle (Coleoptera:Scolytidae). *Environ. Entomol.* 13(4):1069-1073; 1984.
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